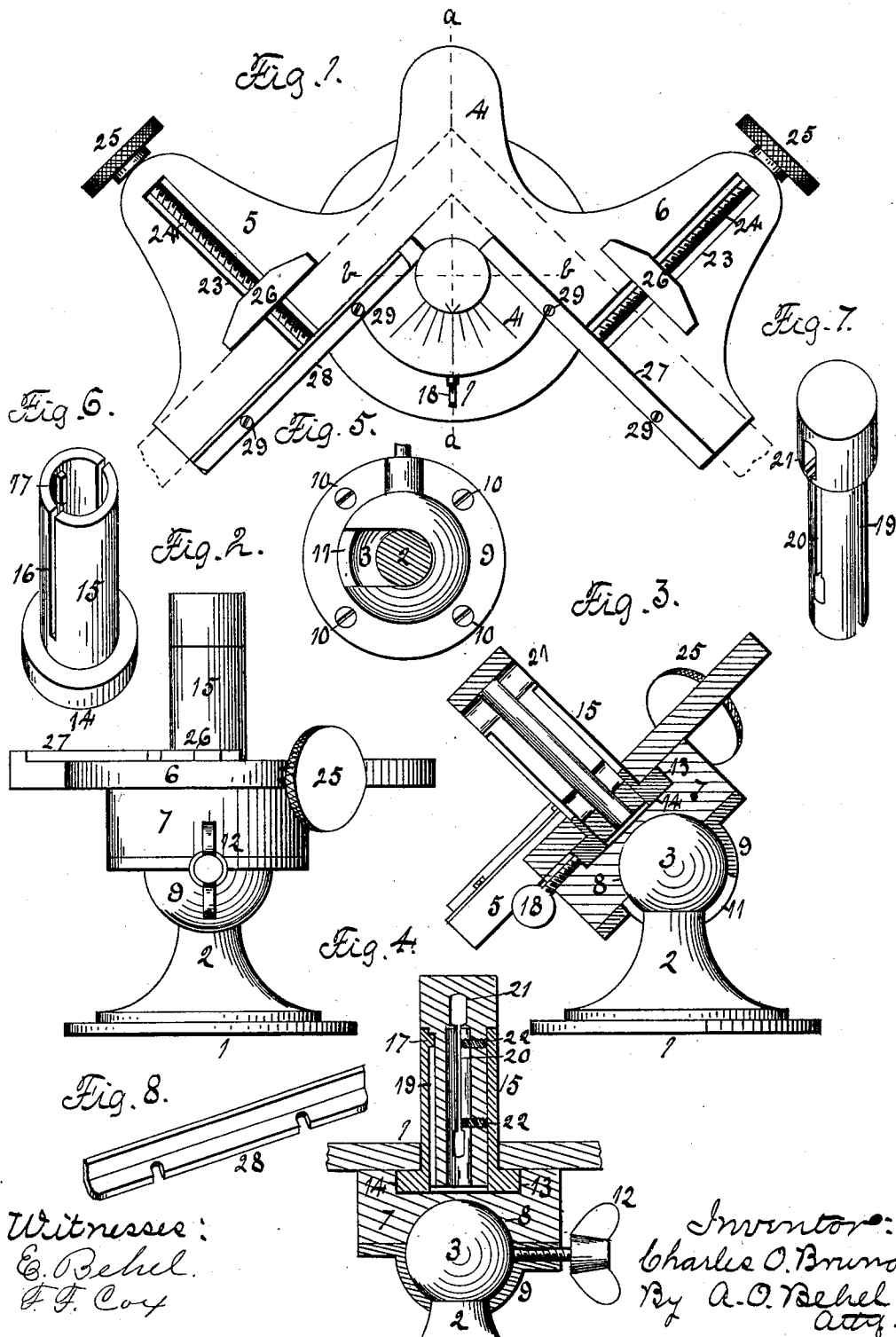


(No Model.)

C. O. BRUNO.  
MITERING MACHINE.

No. 600,118.

Patented Mar. 1, 1898.



# UNITED STATES PATENT OFFICE.

CHARLES O. BRUNO, OF ROCKFORD, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
ROCKWOOD SAGER, OF SAME PLACE.

## MITERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 600,118, dated March 1, 1898.

Application filed August 9, 1897. Serial No. 647,654. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES O. BRUNO, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Mitering-Machines, of which the following is a specification.

The object of this invention is to construct a mitering-machine having a swivel connection with a standard, a saw-guide made vertically self-adjustable, and movable clamps for holding the material to be operated upon.

In the accompanying drawings, Figure 1 is a plan view of my improved mitering-machine. Fig. 2 is an end elevation. Fig. 3 is a vertical section on dotted line *a*, Fig. 1. Fig. 4 is a vertical section on dotted line *b*, Fig. 1. Fig. 5 is an under face view of the ball-and-socket connection. Fig. 6 is an isometrical representation of the saw-guide support. Fig. 7 is an isometrical representation of the saw-guide. Fig. 8 is an isometrical representation of support for the material.

The standard or support consists of the base 1, having a shank 2, supporting a ball 3 at its upper end. The ball and shank are separate parts and connected together in any suitable manner after the cap 9 is placed in position, as shown.

The shelf supporting the material to be operated upon has a main portion 4 and two wings 5 and 6, located at right angles to each other. The main portion supports a cylindrical block 7, secured to its under face, having a cup-shaped recess 8 in its under face, within which is located the ball 3 of the standard, which is held in position by a cap 9, through which screws 10 pass into the shelf portion. This cap has a cut-away portion 11. (Shown at Fig. 5.) A set-screw 12, having a screw-threaded connection with the cap, rests against the ball, by means of which the shelf can be held when adjusted upon the ball. The upper face of the block 7 has a recess 13, within which is located the head 14 of the saw-guide support 15, which is cylindrical and has a central lengthwise slot 16 and a stud 17 extending from its inner face. A set-screw 18, having a connection with the block 7, rests in contact with the head of the saw-

guide support, by means of which the support can be held when adjusted.

A saw-guide (shown at Fig. 7) has a lengthwise groove 19 in its outer face and has a slot 20 extending through it in its lengthwise direction, the upper end 21 of the slot being enlarged to receive the back of the saw. This guide is located within its support, the groove 19 receiving the stud 17, which will prevent the turning of the guide, but permitting it to have a lengthwise movement, the upper end of the guide being enlarged, which rests in contact with the upper end of its support. Screws 22 have a connection with the saw-guide and serve to guide the saw and will admit saws of different thicknesses being used. Each of the wings is provided with a slot 23, within which is located a screw-shaft 24, to the outer end of which is secured a hand-wheel 25. A sliding head 26 has a connection with the screw-shaft, and by turning the hand-wheel the head will move in the lengthwise direction of the screw. Each of the wings has an edge 27 raised above the surface of the wing, against which the material to be operated upon rests, and if the material be of extra thickness a movable gage 28 is placed on top of the edge and held in place by the screws 29.

In use the material to be operated upon is placed upon the wings and clamped in place by moving the sliding head against it. If a miter is desired, the saw-support will be turned until the saw will stand in the position shown by the dotted line *a*, Fig. 1, and will be clamped in this position. The material is then cut off first on one wing and then on the other wing, and when brought together they will appear as shown at Fig. 1, and turning the shelf portion upon its ball-and-socket connection with the standard and clamping in its adjusted position will bring the joint between the two members of the material in proper position to be secured together by driving the nails nearly vertical instead of horizontal, which would be the case if the shelf did not tip.

By turning the saw-support the material may be cut at any angle within the range of adjustment and by making the saw-guide ver-

tically adjustable with the saw material of different thickness may be cut.

I claim as my invention—

1. In a mitering-machine, the combination  
5 of a base supporting a ball, a work-supporting shelf provided with a recess in its under face receiving the ball, a cap encircling the ball and secured to the shelf, the cap having  
10 a cut-away portion, a clamping-screw supported by the shelf engaging the ball by which a rigid connection is formed between the base and shelf, and a saw-guide supported by the shelf and movable therewith.

2. In a mitering-machine, the combination  
15 of a base supporting a ball, a work-supporting shelf provided with a recess in its under face receiving the ball, a cap encircling the ball and secured to the shelf, the cap having  
20 a cut-away portion, a clamping-screw supported by the shelf engaging the ball by which a rigid connection is formed between the base and shelf, a saw-guide support supported by the shelf and movable therewith having a rotary movement and a saw-guide supported by  
25 the saw-guide support having a vertical bodily movement, but not a rotary movement in its connection therewith.

3. In a mitering-machine, the combination  
30 of a base supporting a ball, a work-supporting shelf provided with a recess in its under

face receiving the ball, a cap encircling the ball and secured to the shelf, the cap having a cut-away portion, a clamping-screw supported by the shelf engaging the ball by which a rigid connection is formed between the base  
35 and shelf, a saw-guide support supported by the shelf and movable therewith and a saw-guide supported by the saw-guide support having a vertical bodily movement but not a rotary movement in its connection therewith. 40

4. In a mitering-machine, the combination  
40 of a base supporting a ball, a work-supporting shelf provided with a recess in its under face encircling the ball, a cap encircling the ball and secured to the shelf, the cap having  
45 a cut-away portion, a clamping-screw supported by the shelf engaging the ball by which a rigid connection is formed between the base and shelf, a saw-guide support supported by the shelf and movable therewith, a saw-guide  
50 supported by the saw-guide support having a vertical bodily movement but not a rotary movement in its connection therewith, and set-screws supported by the saw-guide adapted to bear against the saw.

CHARLES O. BRUNO.

Witnesses:

A. O. BEHEL,  
E. BEHEL.